

ABSTRACT OF THE DISCLOSURE

The present invention relates to a fluorescent glass capable of being doped with a high concentration of rare earth ions and suitable for optical communication application, and an optical component incorporating it. The fluorescent glass comprises  $\text{Al}_2\text{O}_3$  of 15 to 50 mol%;  $\text{SiO}_2$  of 0 to 80 mol%; an oxide of 5 to 85 mol% in total comprising at least one of  $\text{B}_2\text{O}_3$ ,  $\text{Ga}_2\text{O}_3$ ,  $\text{Y}_2\text{O}_3$ ,  $\text{Ta}_2\text{O}_5$ ,  $\text{Sb}_2\text{O}_3$ ,  $\text{Nd}_2\text{O}_5$ ,  $\text{La}_2\text{O}_3$ , and  $\text{Yb}_2\text{O}_3$ ; and a rare earth ion. Concentration quenching is more suppressed in this fluorescent glass than in conventional fluorescent glasses, and it is thus feasible for the fluorescent glass to be doped with a high concentration of rare earth ions and to highly efficiently generate fluorescence of wavelengths in the signal wavelength bands generally used in optical communication.